

(10/643,697)

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STRUCTURE FILE UPDATES: 29 NOV 2005 HIGHEST RN 868943-57-1
DICTIONARY FILE UPDATES: 29 NOV 2005 HIGHEST RN 868943-57-1

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
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```
*****
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,      *
* effective March 20, 2005. A new display format, IDERL, is now        *
* available and contains the CA role and document type information.   *
*****
```

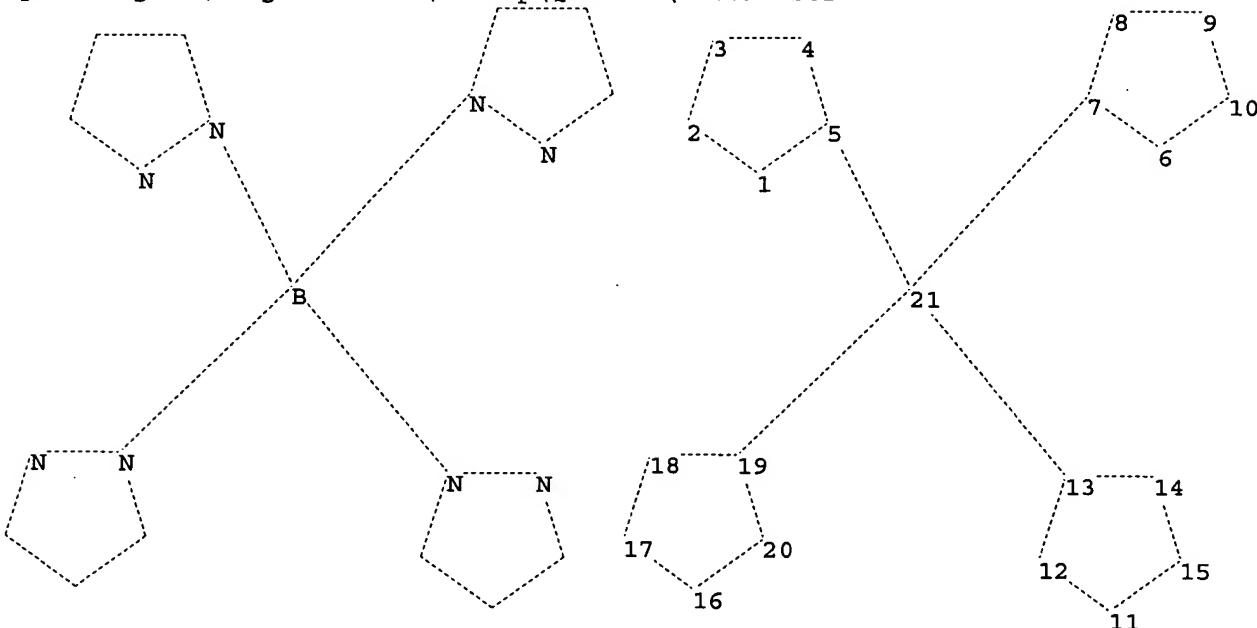
Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\rkc697.str



chain nodes :

21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

```

chain bonds :
5-21 7-21 13-21 19-21
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15 16-17 16-20 17-18 18-19 19-20
exact/norm bonds :
1-2 1-5 2-3 3-4 4-5 5-21 6-7 6-10 7-8 7-21 8-9 9-10 11-12 11-15 12-13
13-14 13-21 14-15 16-17 16-20 17-18 18-19 19-20 19-21

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:CLASS

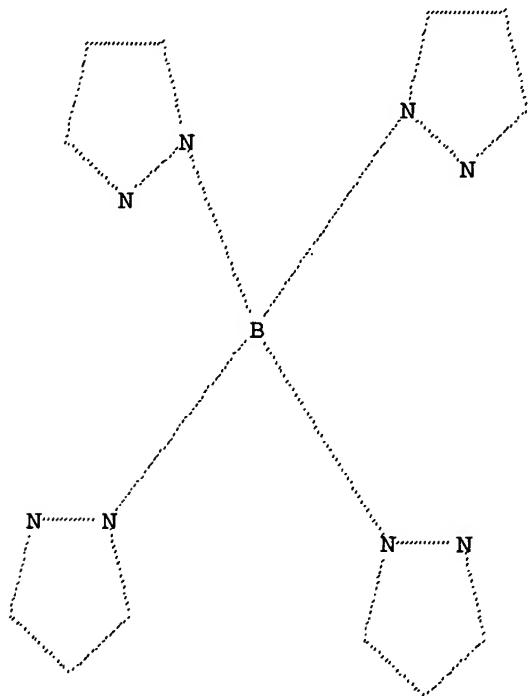
```

L1 STRUCTURE UPLOADED

```

=> d
L1 HAS NO ANSWERS
L1            STR

```



Structure attributes must be viewed using STN Express query preparation.

```

=> s l1 ful
FULL SEARCH INITIATED 11:12:04 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     1027 TO ITERATE

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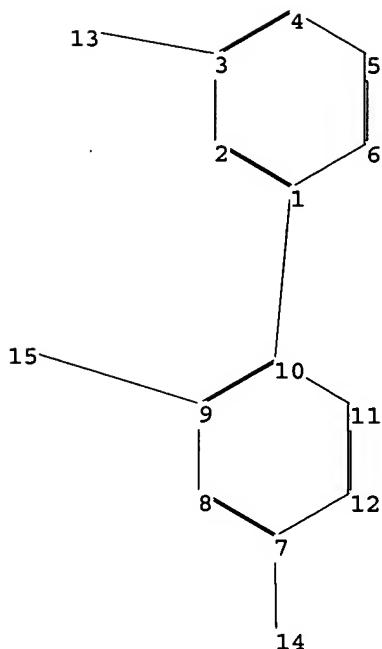
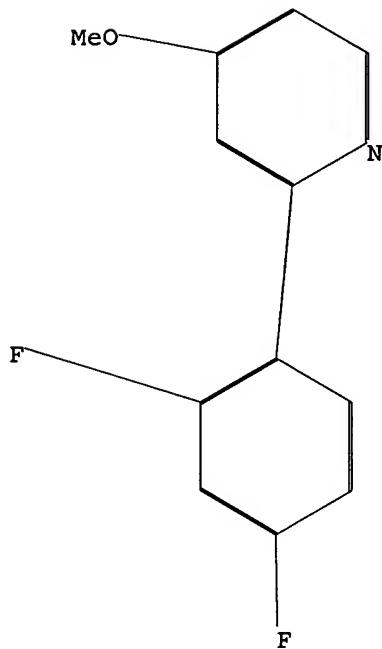
100.0% PROCESSED	1027 ITERATIONS	56 ANSWERS
SEARCH TIME: 00.00.01		

L2 56 SEA SSS FUL L1

```

=>
Uploading C:\Program Files\Stnexp\Queries\rkc6972.str

```



chain nodes :

13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-10 3-13 7-14 9-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact bonds :

1-10 3-13 7-14 9-15

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Connectivity :

6:4 M minimum RC ring/chain 11:4 M minimum RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS

L3 STRUCTURE UPLOADED

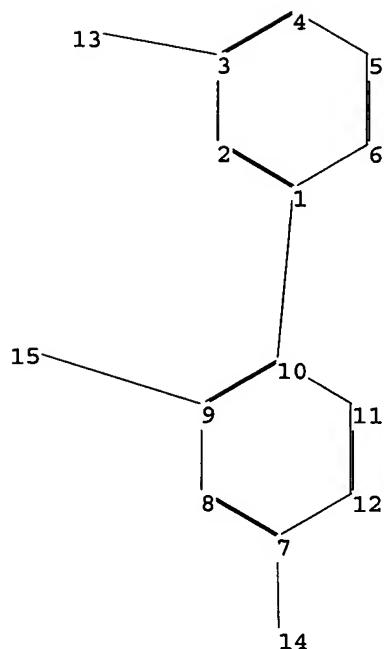
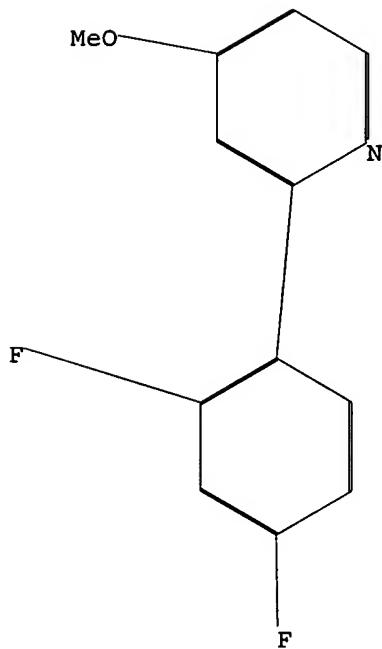
=> s 13 ful
FULL SEARCH INITIATED 11:13:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 362 TO ITERATE

100.0% PROCESSED 362 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

L4 0 SEA SSS FUL L3

=>
Uploading C:\Program Files\Stnexp\Queries\rkc697c.str



chain nodes :

13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-10 3-13 7-14 9-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact bonds :

1-10 3-13 7-14 9-15

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Connectivity :

6:3 M minimum RC ring/chain 11:3 M minimum RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

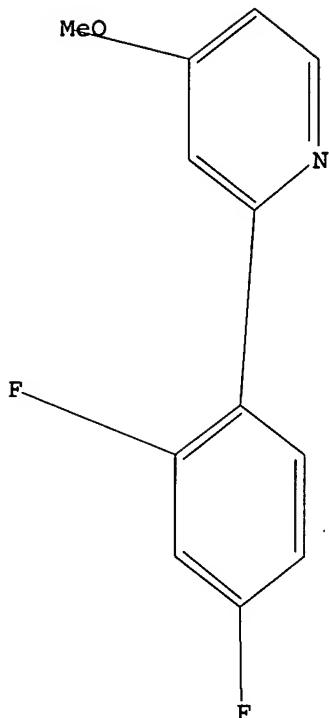
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS

L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s 15 ful
FULL SEARCH INITIATED 11:14:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      362 TO ITERATE
```

```
100.0% PROCESSED      362 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
```

```
L6          0 SEA SSS FUL L5
```

=> fil caplus		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		485.28	485.49

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FILE COVERS 1907 - 1 Dec 2005 VOL 143 ISS 23
FILE LAST UPDATED: 30 Nov 2005 (20051130/ED)
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=> s 12
L7 138 L2

=> s 17 and iridium
38152 IRIDIUM
L8 4 L7 AND IRIDIUM

=> d 1-4 fbib abs fhitstr

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:1019964 CAPLUS
DN 142:13483
TI Organic phosphorescent material and organic optoelectronic device
IN Burn, Paul Leslie; Samuel, Ifor David William; Lo, Shih-Chun
PA Isis Innovation Limited, UK; The University Court of the University of St. Andrews

SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2

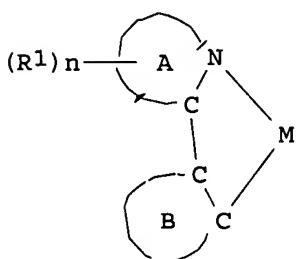
DT Patent
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004101707	A1	20041125	WO 2004-GB2127	20040517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

GB 2003-11234 A 20030516

OS MARPAT 142:13483
GI

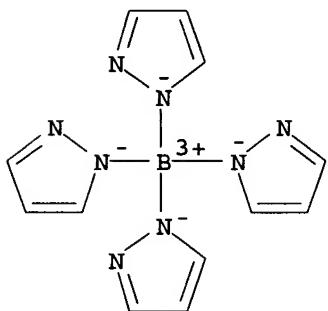


I

AB Cyclometallated complexes are described by the general formula I (M = d-block transition metal; A = five- or six-membered heteroaryl ring comprising at least 3 heteroatoms, preferably N atoms; B = five- or six-membered aryl or heteroaryl ring which is (un)substituted and

optionally fused to ≥ 1 other aryl or heteroaryl rings; R = group other than H, including dendrons or solubilizing groups; n = 0 or ≥ 1 ; and A and B are optionally fused or linked by ≥ 1 covalent bonds). Polymers incorporating the complexes (e.g., as pendent groups or within the main chain) are also described. Optoelectronic devices, and in particular organic light-emitting devices, are described which employ the compds. The light-emitting layers may addnl. comprise a diluent compound such as polymethyl methacrylate. The use of polymethyl methacrylate in an phosphorescent layer to increase quantum efficiency of an organic light-emitting device in which the phosphorescent layer is incorporated, and to improve film formation of an phosphorescent layer, is also described.

IT 14782-58-2, Potassium tetrakis(1-pyrazolyl)borate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (luminescent cyclometallated complexes and organic optoelectronic devices using them)
 RN 14782-58-2 CAPLUS
 CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, potassium (9CI) (CA INDEX NAME)



● K⁺

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:162866 CAPLUS
 DN 140:225477
 TI Organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing the phosphorescent materials
 IN Thompson, Mark E.; Djurovich, Peter I.; Li, Jian
 PA The University of Southern California, USA
 SO PCT Int. Appl., 42 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004017043	A2	20040226	WO 2003-US25936	20030818
	WO 2004017043	A3	20040624		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,			

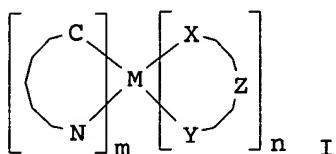
10/643,691

EAST

- Active
 - L1: (1) cyclometall?
 - L2: (2745) pyrazolyl and complexes
 - L3: (30) 12 and phenylpyridine

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 US 2004102632 A1 20040527 US 2003-643697 20030818
 EP 1539773 A2 20050615 EP 2003-788644 20030818
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2002-404087P P 20020816
 WO 2003-US25936 W 20030818
 JP 2005535719 T2 20051124 JP 2004-529127 20030818
 US 2002-404087P P 20020816
 WO 2003-US25936 W 20030818

OS MARPAT 140:225477
GI



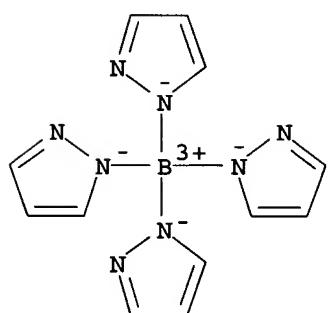
AB Emissive phosphorescent organometallic compds. that produce electroluminescence and organic light emitting devices employing such emissive phosphorescent organometallic compds. are provided, where the organometallic compds. are described by the general formula (I), where M is a metal with an atomic weight > 40, the part to the left of M is a cyclometallated ligand, the part to the right of M is anionic; X and Y are each an independently selected heteroatom-containing group or heterocycle, Z is a divalent linker, m and n are integers selected from 1 and 2 where the sum of n + m is 2 or 3. More specifically the present invention is directed to novel primarily non-emitting ligands which produce a blue shift in emitted light when associated with a cyclometallated ligand.

IT 14782-58-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing phosphorescent materials)

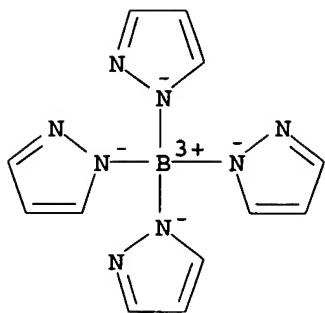
RN 14782-58-2 CAPLUS

CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, potassium (9CI) (CA INDEX NAME)



● K⁺

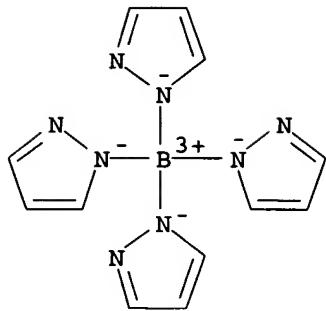
L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:86143 CAPLUS
DN 141:71685
TI Synthesis and characterization of cyclometalated Ir(III) complexes with pyrazolyl ancillary ligands
AU Li, Jian; Djurovich, Peter I.; Alleyne, Bert D.; Tsyba, Irina; Ho, Nam N.; Bau, Robert; Thompson, Mark E.
CS Department of Chemistry, University of Southern California, Los Angeles, CA, 90089-0744, USA
SO Polyhedron (2004), 23 (2-3), 419-428
CODEN: PLYHDE; ISSN: 0277-5387
PB Elsevier
DT Journal
LA English
OS CASREACT 141:71685
AB The syntheses and structures of a series of (*N*,*C*2'-(2-para-tolylpyridine))₂Ir(LX) [(tpy)₂Ir(LX)] and (*N*,*C*2'-(4',6'-difluorophenylpyridine))₂Ir(LX) [(dfppy)₂Ir(LX)] are reported, where LX are pyrazolyl and pyrazolyl-borate ligands. Reaction of the dichloro-bridged dimer [(tpy)₂Ir(μ -Cl)]₂ with excess pyrazolyl-borate ligands forms a protonated-dipyrazolyl Ir complex, (tpy)₂Ir(pz2H). The Ir bound chloride in [(tpy)₂Ir(μ -Cl)]₂ presumably facilitates the hydrolysis of pyrazolyl-borate. Thus, the syntheses of Ir complexes with bis(pyrazolyl)borates, e.g., (tpy)₂Ir(pz2Bp2) and (tpy)₂Ir(pz2BEt2) require the chloride abstraction by CF₃SO₃Ag before pyrazolyl-borate is added to the reaction solution (tpy)₂Ir(pz2H), (tpy)₂Ir(pzH)₂(CF₃SO₃), (tpy)₂Ir(pz2Bp2) and (tpy)₂Ir(pz2BEt2) have been structurally characterized by x-ray crystallog. The two pyrazolyl rings of (tpy)₂Ir(pz2H) are nearly coplanar (dihedral angle, 12°), due to the presence of N-H···N hydrogen bond (N···N distance of 2.56 Å), while the two pyrazolyl rings of (tpy)₂Ir(pzH)₂(CF₃SO₃) are not coplanar (pz-pz dihedral angle, 47°). Unlike other η 2-pyrazolyl-borate complexes, the (tpy)₂Ir(pz2BEt2) exhibits a rare quasi-chair conformation adopted by the ring, rather than the more common boat conformations which have been observed previously. Similarly, the cycle of (tpy)₂Ir(pz2Bp2) adopts a half-chair conformation, more flattened than the typical boat conformation. While the choice of pyrazolyl-borate ligand does not change the structural properties of the "(tpy)₂Ir" fragment, it markedly affects the photophys. properties of both (tpy)₂Ir(pz2BR2) and (dfppy)₂Ir(pz2BR2) complexes. The pyrazolyl-borate ancillary ligands affect the absorption and emission energies of these complexes by tuning the HOMO energies. The electron-withdrawing ancillary ligands, e.g., pz2Bp2-, decrease the electron d. on the iridium, stabilizing the metal-centered HOMOs.
IT 14782-58-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and characterization of cyclometalated phenylpyridinato iridium complexes with pyrazolylborato ancillary ligands)
RN 14782-58-2 CAPLUS
CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, potassium (9CI) (CA INDEX NAME)



● K⁺

RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:6712 CAPLUS
 DN 116:6712
 TI Poly(1-pyrazolyl)boratoiridium and tris(1-pyrazolylmethyl)aminoiridium and -rhodium complexes
 AU Fernandez, Maria J.; Rodriguez, Maria J.; Oro, Luis A.
 CS Inst. Cienc. Mater. Aragon, Univ. Zaragoza, Zaragoza, 50009, Spain
 SO Polyhedron (1991), 10(14), 1595-8
 CODEN: PLYHDE; ISSN: 0277-5387
 DT Journal
 LA English
 OS CASREACT 116:6712
 AB The synthesis of the Ir(HnBPz4-n)(cod) (n = 2, 0; Pz = pyrazolyl; cod = 1,5-cyclooctadiene) complexes is described. They are prepared by reaction of [Ir(μ -Cl)(cod)]₂ with Tl(HnBPz4-n). The carbonyl compds. Ir(HnBPz4-n)(CO)₂ (n = 2, 0) are obtained by carbonylation of the 1,5-cyclooctadiene derivs. The preps. of the [Ir(coe)₂{N(CH₂Pz)₃}]₂BF₄ (coe = cyclooctene) and [M(cod){N(CH₂Pz)₂}]₂BF₄ (M = Ir, Rh) compds. are also reported. They are prepared by treatment of [Ir(μ -Cl)(coe)₂]₂ or [M(μ -Cl)(cod)]₂ with N(CH₂Pz)₃ and NaBF₄. The carbonyl compound [Rh(CO)₂{N(CH₂Pz)₃}]₂BF₄ is obtained by carbonylation of [Rh(cod){N(CH₂Pz)₃}]₂BF₄.
 IT 137755-63-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with cyclooctadieneiridium chloride complex)
 RN 137755-63-6 CAPLUS
 CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, thallium(1+) (9CI) (CA INDEX NAME)



● Tl(I) +

=> FIL STNGUIDE
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	24.80	510.29
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.92	-2.92

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Nov 23, 2005 (20051123/UP).

=>

=>
Executing the logoff script...

=> LOG H

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.48	510.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.92

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:23:13 ON 01 DEC 2005
Connection closed by remote host
END

Unable to generate the STN prompt.
Exiting the script...

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: sssptau129rc

PASSWORD :

TERMINAL (ENTER 1, 2, 3, OR ?):2

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AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005.
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=> fil caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

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FILE LAST UPDATED: 30 Nov 2005 (20051130/ED)

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<http://www.cas.org/infopolicy.html>

=> s cyclometall?
L1 341 CYCLOMETALL?

=> s l1 and pyrazole
20280 PYRAZOLE
L2 5 L1 AND PYRAZOLE

=> d 1-5 fbib abs fhitstr

L2 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:331829 CAPLUS
DN 143:43957
TI Novel cyclometallated Pd(II) and Pt(II) complexes with indole derivatives and their use as catalysts in Heck reaction
AU Cravotto, Giancarlo; Demartin, Francesco; Palmisano, Giovanni; Penoni, Andrea; Radice, Tiziano; Tollari, Stefano
CS Dipartimento di Scienza e Tecnologia del Farmaco, Universita degli Studi di Torino, Turin, 10125, Italy
SO Journal of Organometallic Chemistry (2005), 690(8), 2017-2026
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier B.V.
DT Journal
LA English
AB Several palladacycle and platinacycle complexes were prepared from easily available or naturally occurring indole derivs., such as gramine and related compds. Dimeric complexes were obtained with Pd(OAc)₂, while Pt(DMSO)Cl₂ mainly afforded monomeric structures. A notable feature of these reactions was the formation of new M-C bonds between Pd or Pt and C-2 and C-3 of the indole ring. With ligands like 2-(2'-pyridyl)-1H-indoles, N-N metallacycles were generated instead: in fact new C-M bonds with the C-3 position could only form if N-substituted indoles were used. The reactivity of Pd dimeric complexes with PPh₃, sym-collidine and DMAP was explored to obtain monomeric complexes. Three such compds. were prepared, one of which was characterized by x-ray diffraction. Metathetical reactions were carried out to effect a ligand exchange replacing OAc with halide ions, with the aim to synthesize μ -Cl and μ -Br bridged structures. Turning to the synthesis of hetaryl complexes, functionalization of the C-2 position on the indole ring was achieved. These complexes were prepared by substitution reactions starting from gramine and/or its alkylammonium salts.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:162866 CAPLUS

DN 140:225477

TI Organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing the phosphorescent materials

IN Thompson, Mark E.; Djurovich, Peter I.; Li, Jian

PA The University of Southern California, USA

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

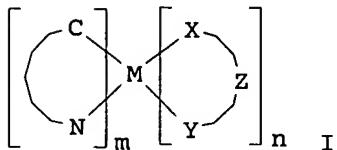
FAN.CNT 1

PATENT NO.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004017043	A2	20040226	WO 2003-US25936	20030818
WO 2004017043	A3	20040624		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004102632	A1	20040527	US 2002-404087P	P 20020816
EP 1539773	A2	20050615	US 2003-643697	20030818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			US 2002-404087P	P 20020816
JP 2005535719	T2	20051124	EP 2003-788644	20030818
			WO 2003-US25936	W 20030818
			JP 2004-529127	20030818
			US 2002-404087P	P 20020816
			WO 2003-US25936	W 20030818

OS MARPAT 140:225477

GI



AB Emissive phosphorescent organometallic compds. that produce electroluminescence and organic light emitting devices employing such emissive phosphorescent organometallic compds. are provided, where the organometallic compds. are described by the general formula (I), where M is a metal with an atomic weight > 40, the part to the left of M is a cyclometallated ligand, the part to the right of M is anionic; X and Y are each an independently selected heteroatom-containing group or heterocycle, Z is a divalent linker, m and n are integers selected from 1 and 2 where the sum of n + m is 2 or 3. More specifically the present invention is directed to novel primarily non-emitting ligands which produce a blue shift in emitted light when associated with a cyclometallated ligand.

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:608234 CAPLUS

DN 115:208234

TI Organodipalladium(II) cyclometallates of the Schiff base

AU N,N'-diethyl-2,6-dialdiminobenzene
AU Chakladar, Sukla; Paul, Parimal; Nag, Kamalaksha
CS Dep. Inorg. Chem., Indian Assoc. Cultiv. Sci., Calcutta, 700 032, India
SO Polyhedron (1991), 10(13), 1513-19
CODEN: PLYHDE; ISSN: 0277-5387
DT Journal
LA English
OS CASREACT 115:208234
AB Syntheses and reactions of dipalladiobenzene derivs. are reported. Li₂[PdCl₄] reacts with N,N'-diethyl-2,6-dialdiminobenzene (H₂L) to form the cyclometalated compound, [Pd₄L₂Cl₄], in which metalation occurs at the 3,5-carbon atoms of the aromatic ring. The tetrachloro compound can be converted to a dinuclear precursor complex, [Pd₂L(MeCN)₂(ClO₄)₂], which reacts with pyridine, 4-methylpyridine, pyrazole and imidazole (B) to produce complexes of the type [Pd₂L(B)4](ClO₄)₂, and with 2,2'-bipyridine to produce [Pd₂L(bpy)2](ClO₄)₂. A tetranuclear neutral complex [Pd₄L₂(pz)₄] is formed when the precursor complex interacts with pyrazole and Et₃Me. A series of neutral chelate compds. [Pd₂L(AB)2] was obtained by treating the precursor with sodium salts of acetylacetone, ethylacetooacetate, N-methylsalicylaldimine and N,N''-dimethyldithiocarbamic acid. The compds. were characterized from their ¹H NMR spectra.

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:552700 CAPLUS
DN 113:152700
TI Cyclometalation of polydentate ligands containing pyrazole groups, including the synthesis of platinum(IV) complexes with tripodal [N-C-N]- ligand systems
AU Carty, Allan J.; Honeyman, R. Thomas
CS Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia
SO Journal of Organometallic Chemistry (1990), 387(2), 247-63
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
OS CASREACT 113:152700
AB Dimethylplatinum(II) complexes, PtR₂(L), have been made by reaction of [PtR₂(μ-SEt₂)₂] with a range of polydentate N donor ligands containing one or more pyrazol-1-yl (pz) donor groups, including the new ligand bis(pyrazol-1-yl)(thien-2-yl)methane. The complexes give cis-PtMe₂(py)₂ when dissolved in pyridine at ambient temperature, except for PtMe₂(L) [L = (pz)₂CH₂, (pz)₂C(H)Ph, (pz)₃CH, (pz)₂(mim)CH (mim = N-methylimidazol-2-yl)], which undergo cyclometalation at a C(5) position of one pyrazol-1-yl ring. The cyclometallated ligands have been examined as isoelectronic analogs of N donor poly(pyrazol-1-yl)alkane and poly(pyrazol-1-yl)borate ligands. A CO derivative, PtMe{(pz)₂(C₃H₂N₂)CH-N,C}(CO) and a series of phosphine complexes have been prepared. The complex PtMe{(pz)₂(C₃H₂N₂)CH-N,C}(py) and polymeric [PtMe{(pz)₂(C₃H₂N₂)CH}]_n undergo oxidative addition reactions with organic halides to give the platinum(IV) complexes [fac-PtMe(R){(pz)₂(C₃H₂N₂)CH-N,N',C}(py)]X and fac-PtXMe(R){(pz)₂(C₃H₂N₂)CH-N,N',C} (I, resp.). The new reagent 1-bromo-2-(pyrazol-1-yl)ethane forms [fac-PtMe{(pz)₂(C₃H₂N₂)CH-N,N',C}(pzCH₂CH₂-N,C)]Br, containing both [N-C-N]- and [N-C]-ligands. Reaction of MeI or PhCH₂Br with PtMe₂{(pz)₃CH} gives I directly, and PtMe₂{(pz)₄C} undergoes a similar cyclometalation/oxidative addition in MeI to form fac-PtIMe₂{(pz)₃(C₃H₂N₂)CH-N,N',C}.

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1975:579265 CAPLUS
DN 83:179265
TI Cyclometallation reactions. XIII. Reactions of phenyl-substituted heterocyclic nitrogen-donor ligands
AU Bruce, Michael I.; Goodall, Brian L.; Matsuda, Isamu
CS Dep. Inorg. Chem., Univ. Bristol, Bristol, UK
SO Australian Journal of Chemistry (1975), 28(6), 1259-64

CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The preparation of metalated complexes of Mn or Re derived from 2-phenylpyridine, 1,4-diphenylquinoxaline, 1-phenylpyrazole, 4-phenylpyrimidine, 1,4-diphenylphthalazine and 2,5-diphenyloxazole is described. Thus, heating 2-phenylpyridine with MnMe(CO)5 gave I.

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FULL ESTIMATED COST	19.28	19.49

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CA SUBSCRIBER PRICE	-3.65	-3.65

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FULL ESTIMATED COST	0.30	19.79

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CA SUBSCRIBER PRICE	0.00	-3.65

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